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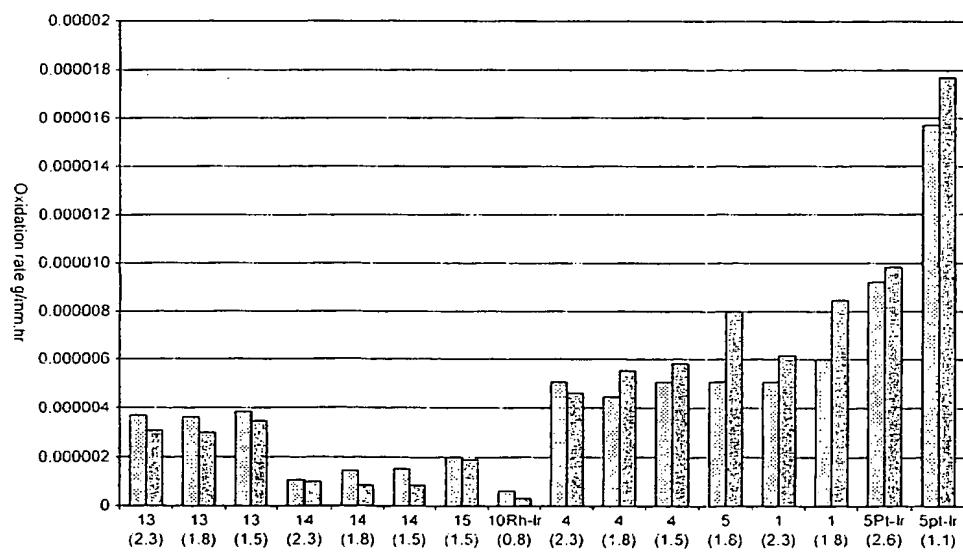
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(57) Abstract: An iridium alloy consists essentially of iridium and at least one of W and Zr, and optionally Rh. When present, W comprises between 0.01 and 5 wt % of the alloy; when present in combination with W, Zr comprises between 0.01 and 0.5 wt % of the alloy; when present alone or in combination with Rh only, Zr comprises between 0.01 and 0.09 wt % of the alloy; and when present, Rh comprises between 0.1 and 5 wt % of the alloy. The alloys may be modified by the addition of platinum and other platinum group metals and base metals. The alloys demonstrate enhanced physical and chemical properties and are suitable for use as electrode materials in spark plugs and other high temperature applications.